## **IN THE CLAIMS:**

Please amend the claims where indicated below:

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- 1. (currently amended) A vertical cavity surface emitting laser, comprising:
  an active region further comprising at least one quantum well having a well depth of
  at least 40 meV, wherein said depth is defined as the difference between a valence band
  offset and a conduction band offset, said quantum well being comprised of InGaAs and
  further including GaAs barrier layers sandwiching said at least one quantum well; and
  GaAs confinement layers sandwiching said active region.
- 2. (previously *amended*) The vertical cavity surface emitting laser of claim 1 wherein said at least one quantum well is up to and including 50Å in thickness.
- 3. (currently amended) A vertical cavity surface emitting laser, comprising: an active region further comprising at least one quantum well having a well depth of at least 40 meV, wherein said depth is defined as the difference between a valence band offset and a conduction band offset, said quantum well being comprised of InGaAs and further including GaAsN barrier layers sandwiching said at least one quantum well; and AlGaAs confinement layers sandwiching said active region.
- 4. (previously amended) The vertical cavity surface emitting laser of claim 3 wherein said at least one quantum well is up to and including 50Å in thickness.
- 5. (currently amended) A vertical cavity surface emitting laser, comprising: an active region further comprising at least one quantum well having a well depth of at least 40 meV, wherein said depth is defined as the difference between a valence band offset and a conduction band offset, said quantum well being comprised of InGaAs and further including AlGaAs barrier layers sandwiching said at least one quantum well; and

GaAsN confinement layers sandwiching said active region.

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(b)

6. (previously amended) The vertical cavity surface emitting laser of claim 5 wherein said at least one quantum well is up to and including 50Å in thickness.